

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

Airworthiness Directive

87-14-01R1 PRATT & WHITNEY: Amendment 39-5641 as revised by Amendment 39-6359. Docket No. 79-ANE-18.

Applicability: Pratt & Whitney (PW) JT8D-1, -1A, -1B, -7, -7A, -7B, -9, -9A, -11, -15, and -17 turbofan engines.

Compliance: Required as indicated, unless already accomplished.

To prevent uncontained second stage fan blade failure, ultrasonically inspect and fluorescent penetrant inspect (FPI) for cracks, and remove as required, second stage fan blades, Part Numbers (P/N) 433802, 645902, 759902, 695932, 678102, and 746402, in accordance with PW Alert Service Bulletin (ASB) 5729, Revision 2, dated July 8, 1988, as follows:

- (a) Inspect at the first engine shop visit after July 27, 1987.
- (b) Reinspect at each second stage fan rotor disassembly from the low pressure compressor (LPC) after accumulation of 3,000 cycles in service (CIS) since last inspection (SLI), but not to exceed 10,000 CIS SLI.
- (c) Remove from service, prior to further flight, second stage fan blades that exhibit crack indications as defined in the requirements of PW ASB 5729, Revision 2, dated July 8, 1988, and replace with serviceable blades.
- (d) Report the following information in writing if a blade is found to be cracked, within 30 days of the inspection to the Manager, Engine Certification Office, Engine and Propeller Directorate, Aircraft Certification Service, Federal Aviation Administration, 12 New England Executive Park, Burlington, Massachusetts 01803; Telex Number 949301 FAANE BURL:

- (1) Engine serial number (N)
- (2) Inspection date
- (3) Blade P/N and S/N
- (4) Blade total time and cycles (if estimate, so note)
- (5) Blade time and cycles SLI
- (6) Crack location and size

Information collection requirements contained in this regulation (Section 39.13) have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (Pub. L. 96-511) and have been assigned OMB Control Number 2120-0056.

NOTES:

- (1) Shop visit is defined as the input of an engine to a repair shop with LPC rotor overhaul capability where the subsequent engine maintenance entails the following:
 - (a) Separation of a major engine flange (lettered or numbered) other than flanges mating with major sections of the nacelle or reverser. Separation of flanges purely for purposes of shipment, without subsequent internal maintenance, is not a "shop visit."
 - (b) Removal of a disk, hub, or spool.
- (2) The ultrasonic inspections accomplished in accordance with AD 87-14-01 and PW ASB 5729, dated January 29, 1987, at the last inspection prior to the effective date of this AD, are considered to be in compliance with the dual inspection requirements of this AD. However, after the effective date of this AD, an FPI must be performed in addition to the ultrasonic inspection, unless otherwise approved by the FAA as stated below.

(e) Aircraft may be ferried in accordance with the provisions of FAR 21.197 and 21.199 to a base where the AD can be accomplished.

(f) Upon submission of substantiating data by an owner or operator through an FAA Airworthiness Inspector, an alternate method of compliance with the requirements of this AD or adjustments to the compliance times specified in this AD may be approved by the Manager, Engine Certification Office, ANE-140, Engine and Propeller Directorate, Aircraft Certification Service, Federal Aviation Administration, 12 New England Executive Park, Burlington, Massachusetts 01803.

The inspection procedures shall be done in accordance with PW ASB 5729, Revision 2, dated July 8, 1988. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552 (a) and 1 CFR Part 51. Copies may be obtained from Pratt & Whitney, Publication Department, P.O. Box 611, Middletown, Connecticut 06457. Copies may be inspected at the Regional Rules Docket, Office of the Assistant Chief Counsel, Federal Aviation Administration, New England Region, 12 New England Executive Park, Room 311, Burlington, Massachusetts 01803, or at the Office of the Federal Register, 1100 L Street, NW, Room 8301, Washington, DC 20591.

Airworthiness Directive 87-14-01 superseded AD 80-11193 R1, Amendment 39-4148, which became effective on June 30, 1981.

This amendment revises AD 87-14-01, Amendment 39-5641, (52 FR 24138; June 29, 1987), which became effective on July 27, 1987.

This amendment (39-6359, AD 87-14-01 R1) becomes effective on December 11, 1989.

SUPERSEDED